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MONOGRAPH

OF

VITRINELLA,

A NEW GENUS OF NEW SPECIES OF TURBINIDÆ,

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VITRINELLA ADAMS.

Testâ turbiniformi, minimâ, vitreâ; aperturâ maximâ, orbiculari, subtus valde indentatâ, vel umbilicatâ.

Shell turbiniform, vitreous, minute, with a large orbicular aperture, either umbilicated or with the umbilical region deeply and widely indented.

The form of the aperture would place these shells in *Turbo* or *Margarita*. The want of an umbilicus excludes three of the species from the latter. The operculum is unknown; but as it is extremely improbable that thin vitreous almost transparent shells should have solid calcareous opercula, we may assume it to be horny, which will exclude the species from Turbo, regarding this genus as best characterized by the operculum. The most widely umbilicated species approximates in form to *Skenea*, and might be mistaken for a depressed umbilicated species of Helix. In texture, the nearest approach among the kindred genera is in *Margarita arctica Leach*. From all the Turbinidæ known to us, they are however well distinguished by their vitreous texture and rapid enlargement of the whorls, which last character produces a large aperture. The variation

in respect of an umbilicus is parallel with the similar variation in Turbo. They are not the young of any larger species, for the first one or one and one-half whorls are distinguished from the following whorls by nuclear peculiarities, as want of sculpture, &c. We are acquainted with the young of all the larger species which inhabit the same localities, and none of them resemble these shells.

Most of the specimens were obtained from a pint of sand, which contained 110 species of shells, and which was taken from a surface of three or four square yards of sand beach in a little cove near Port Royal, Jamaica, on the outside of the peninsula. A few were found on the inside of the peninsula. Of *V. megastoma* and *V. interrupta* we obtained several specimens: of the other species,—one to four of each. Probably all the species are rare.

TABLE OF MEASUREMENTS.

	Mean divergence.	Length of spire.	Total length.	Greatest breadth.	Least breadth.	Length of spire.	Total length.	Greatest length.	Least breadth.
V. hyalina.	95°	.02	.05	.065	.055	.508	1.27	1.65	1.397
V. interrupta.	100°	.015	.035	.045	.038	.381	.889	1.142	.965
V. megastoma.	130°	.01	.033	.06	.045	.254	.838	1.524	1.142
V. tincta.	135°	.015	.035	.055	.045	.381	.889	1.397	1.142
V. helicoidea.	150°	.01	.03	.075	.06	.254	.762	1.906	1.524
		inch.				millimetres.			

Vitrinella hyalina. Adams.

V. t. globosâ, albâ, subtransparente, laevi, nitidâ: apice obtusâ: spirâ convexâ, elevatâ: anfractibus quatuor, perconvexis, suturâ impressâ, anf. ultimo magno, regulariter rotundato, subtus valde indentato.

Globose:
white, subtransparent:
smooth and shining:
apex obtuse:
spire with the outlines very convex:
whorls four, very convex, with a well impressed suture; last whorl rather large and regularly rounded:
aperture slightly modified by the penult whorl:
umbilical region well indented.

Mean divergence about 95°; length of spire .02 inch; total length .05 inch; greatest breadth .065 inch; least breadth .055 inch.

Vitrinella interrupta. Adams.

V. t. globosâ, subconicâ, albâ, subtransparente : sulcis elevatis tribus suprà, et sulcis minoribus quinque vel sex subtus, spiralibus insculptâ ; striis transversis candidis subdistantibus a sulcis interruptis ornatâ : apice perobtusâ : spirâ elevatâ, convexâ : anfractibus quatuor, convexis, suturâ haud valde impressâ ; anf. ultimo magno, regulariter rotundato, subtus latè et profundè indentato.

Depressed globose conic :

white, subtransparent in the last whorl :

with three rather large more or less elevated spiral grooves above, and five or six of less size beneath ; with somewhat distant opaque white transverse striæ, which are interrupted by the spiral grooves :

apex very obtuse :

spire with very convex outlines :

whorls four, quite convex, with a moderately impressed suture ; last whorl rather large, rapidly increasing, well rounded :

aperture scarcely modified by the penult whorl :

umbilical region widely and deeply indented.

Mean divergence about 100° ; length of spire .015 inch ; total length .035 inch ; greatest breadth .045 inch; least breadth .038 inch.

Vitrinella megastoma Adams.

V. t. depressâ, transversè ovatâ, albâ, translucente, laevi, nitidâ : apice obtusâ : spirâ convexâ anfractibus tribus, subconvexis, suturâ conspicuâ ; anf. ultimo prope aperturam maximo, regulariter rotundato.

Much depressed, transversely ovate :
white, translucent :
smooth and shining :
apex very obtuse :
spire convex, but little elevated :
whorls a little more than three, moderately convex, with a distinct suture ; last whorl very large, rapidly increasing in the last part, well rounded :
aperture scarcely modified by the last whorl :
umbilical region very widely and deeply indented.

Mean divergence about 130° ; length of spire .01 inch ; total length .033 inch ; greatest breadth .06 inch, least breadth .045 inch.

Vitrinella tincta. Adams.

V. t. subdiscoideâ: albâ, anfractum ultimum rubro tinctâ, striis plurimis et carinis duobus parvis cinctâ: apice obtusâ; spirâ convexâ: anfractibus tribus, valde accrescentibus, suturâ impressâ: umbilico profundo.

Globose discoidal:

white, translucent, with stains of reddish purple on the last whorl:

with numerous spiral striæ, and two small distant revolving carinæ on either side of the periphery of the last whorl:

apex obtuse:

spire convex, but little elevated:

whorls three, rapidly increasing from the first, with a well impressed suture; last whorl somewhat concave beneath the lower carina:

aperture scarcely modified by the last whorl:

umbilicus deep, not very wide.

Mean divergence about 135°; length of spire .015 inch; total length .035 inch; greatest breadth .055 inch; least breadth .045 inch.

Vitrinella helicoidea. Adams.

V. t. discoideâ, albâ, opacâ vel translucente, lineâ suturali impressâ, et striis transversis inequalibus insculptâ : apice perobtusâ : spirâ convexâ, vix elevatâ : anfractibus quatuor, subconvexis ,valde accrescentibus ; suturâ vix impressâ : labio subcrasso : umbilico magno, profundo, carinâ spirali instructo.

Discoidal :

white, opaque and translucent in transverse alternating lines :

with a single impressed spiral line near the summit of the whorls, and very fine irregular transverse striæ :

apex very obtuse :

spire slightly and convexly elevated :

whorls four, moderately convex, rapidly increasing, with a lightly impressed suture ; last whorl regularly rounded, a little compressed beneath.

aperture not modified by the last whorl :

labium with a rather thick deposit :

umbilicus large and deep, with a spiral carina, exhibiting all the whorls.

Mean divergence about 150° ; length of spire .01 inch ; total length .03 inch ; greatest breadth .075 inch ; least breadth .06 inch.

"CONTRIBUTIONS TO CONCHOLOGY" are issued by the subscriber, at irregular intervals of time, in numbers of 16 or 20 pp. each.

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☞The shells, which were collected in my last expedition to Jamaica, belong to the Zoological Museum of Amherst College. The Trustees of the College have directed the sale of a part of the duplicates. Suites, either of all or of one or more genera of the land and fresh-water shells, will be furnished at 30 cents per species : or selections may be made at a fixed price for each species, and the remainder returned. The marine shells will be furnished at 25 cents per species, without distinction except in favor of priority of application. A catalogue of all the marine species will soon be published.

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